

WHAT IS CLAIMED IS:

1. A method of controlling the operation of at least one motion device by directly implementing electronic simulation information, wherein the at least one motion device comprises at least one controllable element, said method comprising:

5 extracting process information from the electronic simulation information;  
formatting the process information into neutral process information, wherein the neutral process information is in a format independent of a format of the electronic simulation information;

10 interpreting the neutral process information into operation information for each of the at least one controllable element, wherein the operation information depends on a type of the at least one motion device; and

distributing the operation information to the at least one controllable element of the at least one motion device to thereby control the operation of the at least one motion device.

15 2. A method according to Claim 1, wherein the at least one motion device comprises a plurality of motion devices, wherein interpreting comprises interpreting the neutral process information into operation information specific to the type of each of the plurality of motion devices, and wherein distributing comprises distributing the  
20 operation information to the at least one controllable element of respective motion devices of the plurality of motion devices.

3. A method according to Claim 1, wherein the electronic simulation  
25 information comprises electronic simulation information in at least one format, and wherein formatting comprises formatting the process information extracted from the electronic simulation information into the neutral process information in a neutral format independent of the at least one format of the electronic simulation information.

4. A method according to Claim 1, wherein the at least one motion device  
30 operates according to operation information in at least one format, and wherein interpreting comprises interpreting the neutral process information into operation information in the at least one format of the at least one motion device.

5. A method according to Claim 1, wherein the electronic simulation information comprises electronic simulation information in at least one format, wherein the at least one motion device operates according to operation information in at least one format, wherein formatting comprises formatting the process information  
5 extracted from the electronic simulation information into the neutral process information in a neutral format independent of the at least one format of the electronic simulation information, and wherein interpreting comprises interpreting the neutral process information into operation information in the at least one format of the at least one motion device.

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6. A method according to Claim 5, wherein formatting comprises formatting the process information into the neutral process information in a neutral format independent of the at least one format of the electronic simulation information, and further independent of the at least one format of the operation information of the  
15 at least one motion device.

7. A method according to Claim 1, wherein the at least one motion device comprises at least one machine tool, and wherein distributing comprises distributing the operation information to the at least one machine tool to thereby control the  
20 operation of the at least one machine tool.

8. A system for controlling the operation of at least one motion device comprising at least one controllable element, said system comprising:  
a setup component capable of extracting process information from electronic  
25 simulation information, wherein the electronic simulation information includes information relating to the operation of the at least one motion device, wherein said setup component is further capable of formatting the process information into neutral process information, wherein the neutral process information is in a format independent of a format of the electronic simulation information; and  
30 at least one motion command component capable of receiving the neutral process information from said setup component, wherein each motion command component is associated with at least one motion device, wherein each motion command component is capable of interpreting the received neutral process information into operation information for the at least one controllable element of

each respective motion device, wherein the operation information depends on a type of the at least one motion device, and wherein each motion command component is further capable of distributing the operation information to the at least one controllable element of each respective motion device to thereby control the operation  
5 of the respective motion devices.

9. A system according to Claim 8, wherein the at least one motion device comprises a plurality of motion devices, said setup component is capable of interpreting the neutral process information into operation information specific to the  
10 type of each of the plurality of motion devices, and wherein each motion command component is capable of distributing the operation information to the at least one controllable element of each respective motion device of the plurality of motion devices.

15 10. A system according to Claim 8, wherein the electronic simulation information comprises electronic simulation information in at least one format, and wherein said setup component is capable of formatting the process information extracted from the electronic simulation information into the neutral process information in a neutral format independent of the at least one format of the electronic  
20 simulation information.

11. A system according to Claim 8, wherein the at least one motion device operates according to operation information in at least one format, and wherein each motion command component is capable of interpreting the neutral process  
25 information into operation information in the format of each respective motion device.

12. A system according to Claim 8, wherein the electronic simulation information comprises electronic simulation information in at least one format, wherein the at least one motion device operates according to operation information in  
30 at least one format, wherein said setup component is capable of formatting the process information extracted from the electronic simulation information into the neutral process information in a neutral format independent of the at least one format of the electronic simulation information, and wherein each motion command component is

capable of interpreting the neutral process information into operation information in the format of each respective motion device.

13. A system according to Claim 12, wherein said setup component is  
5 capable of formatting the process information into the neutral process information in a neutral format independent of the at least one format of the electronic simulation information, and further independent of the at least one format of the operation information of the at least one motion device.

10 14. A system according to Claim 8, wherein the at least one motion device comprises at least one machine tool, and wherein each motion command component is capable of distributing the operation information to each respective machine tool to thereby control the operation of the respective machine tools.

15 15. A computer program product for controlling the operation of at least one motion device by directly implementing electronic simulation information, wherein the at least one motion device comprises at least one controllable element, the computer program product comprising a computer-readable storage medium having computer-readable program code embodied in said medium, the computer-readable  
20 program code comprising:

a first executable portion for extracting process information from the electronic simulation information;

a second executable portion for formatting the process information into neutral process information, wherein the neutral process information is in a format  
25 independent of a format of the electronic simulation information;

a third executable portion for interpreting the neutral process information into operation information for each of the at least one controllable element, wherein the operation information depends on a type of the at least one motion device; and

a fourth executable portion for distributing the operation information to the at  
30 least one controllable element of the at least one motion device to thereby control the operation of the at least one motion device.

16. A computer program product according to Claim 15, wherein the at least one motion device comprises a plurality of motion devices, wherein said third

executable portion interprets the neutral process information into operation  
information specific to the type of each of the plurality of motion devices, and  
wherein said fourth executable portion distributes the operation information to the at  
least one controllable element of respective motion devices of the plurality of motion  
5 devices.

17. A computer program product according to Claim 15, wherein the  
electronic simulation information comprises electronic simulation information in at  
least one format, and wherein said second executable portion formats the process  
10 information extracted from the electronic simulation information into the neutral  
process information in a neutral format independent of the at least one format of the  
electronic simulation information.

18. A computer program product according to Claim 15, wherein the at  
15 least one motion device operates according to operation information in at least one  
format, and wherein said third executable portion interprets the neutral process  
information into operation information in the at least one format of the at least one  
motion device.

19. A computer program product according to Claim 15, wherein the  
electronic simulation information comprises electronic simulation information in at  
least one format, wherein the at least one motion device operates according to  
operation information in at least one format, wherein said second executable portion  
20 formats the process information extracted from the electronic simulation information  
into the neutral process information in a neutral format independent of the at least one  
format of the electronic simulation information, and wherein said third executable  
25 portion interprets the neutral process information into operation information in the at  
least one format of the at least one motion device.

20. A computer program product according to Claim 19, wherein said  
30 second executable portion formats the process information into the neutral process  
information in a neutral format independent of the at least one format of the electronic  
simulation information, and further independent of the at least one format of the  
operation information of the at least one motion device.

21. A computer program product according to Claim 15, wherein the at  
least one motion device comprises at least one machine tool, and wherein said fourth  
executable portion distributes the operation information to the at least one machine  
5 tool to thereby control the operation of the at least one machine tool.

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